

MX 150 Plus
MX 120 Plus
Service Parts Manual



Part of Thermo Fisher Scientific

Thermo
SCIENTIFIC

PARTS LIST for PREPARATIVE ULTRACENTRIFUGES

Model	Thermo Scientific Sorvall MX 120 Plus Sorvall MX 150 Plus
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HOW TO USE PARTS LIST

This parts list has been compiled to ensure that correct consumptive articles or replacement parts required by our products in your possession will be supplied.

Please refer to this parts list when ordering parts of your requirement.

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
3 - 1	1		S204916B	PANEL Ass'y			Incl. 3 - 2 ~ 10	
3 - 2	1		S204898A	LCD Base Ass'y				
3 - 3	1		S309095A	Interface Board Ass'y				
3 - 4	1		84398301	LCD Inverter				
3 - 5	1		S309336A	LCD Unit Ass'y				
3 - 6	1		S309200	Board Cover				
3 - 7	1		S309232B	LCD Cable Ass'y				
3 - 8	1		S412281B	Touch Panel Cable Ass'y				
3 - 9	1		S412282B	LCD Inverter Cable Ass'y				
3-10	1		S411335B	Earth Inverter Cable Ass'y				
≈	≈	≈	≈	≈	≈	≈	≈	≈

1 → 3

1 . CONTENTS of PARTS LIST

① Constituent No.

No. given to each constituent as an index.

② No.

Reference numbers corresponding to those in the exploded views given with leader lines.

③ Q'ty

The quantity incorporated in or attached to one product not the sales unit.

④ Unit

All the parts composing an assembly unit are indicated by a] and are to be supplied as an assembly.

⑤ Part No., Description

The numbers and the name of parts. The numerals suffixed letter (A, B ...) are indicated assemblies.

⑥ Compatibility

All the Models and constituent group in which the particular part is usable are given.

⑦ Consumptive article

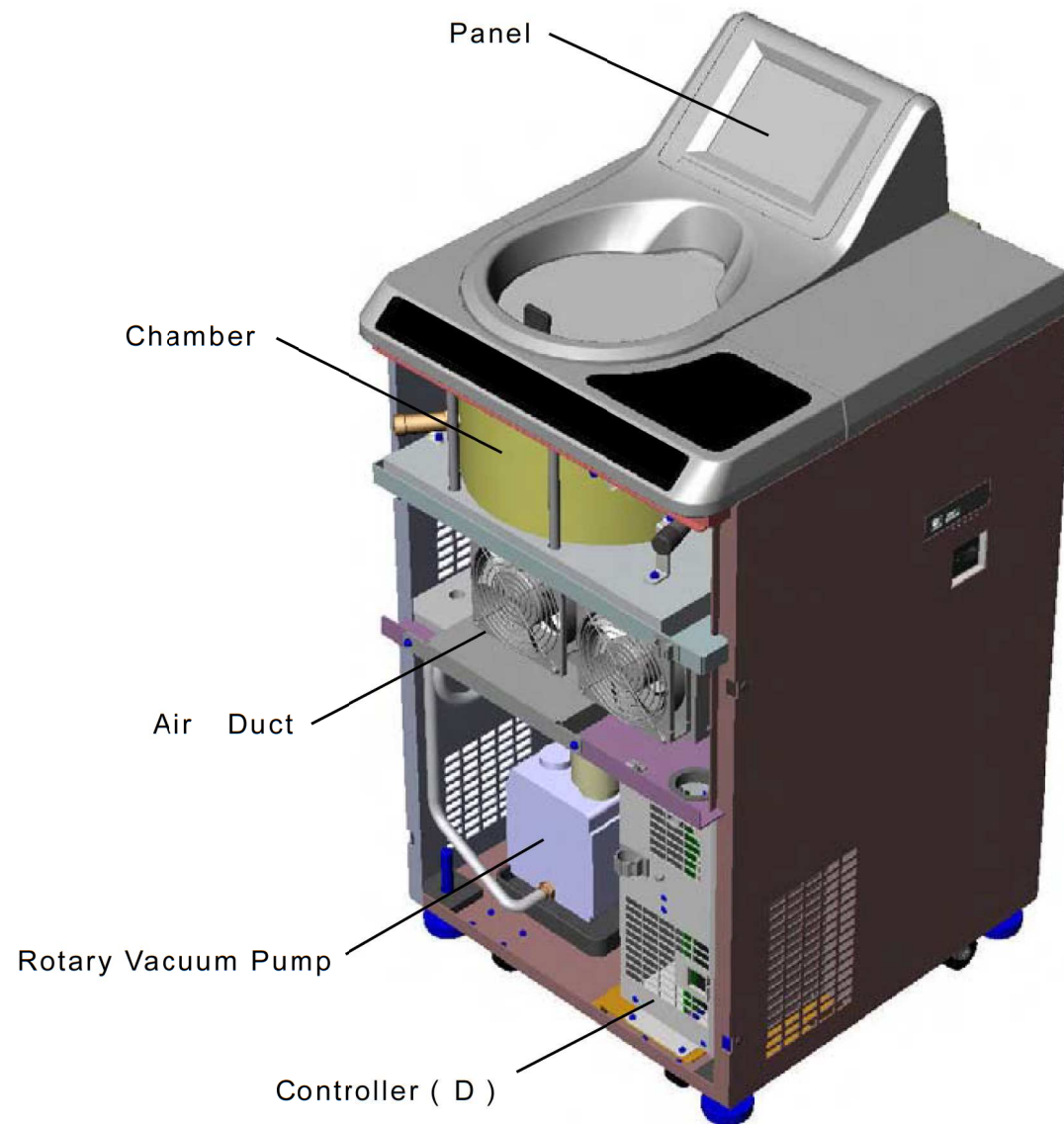
Those parts which are subject to excessive wear, or liable to lost are always kept in stock for immediate supply, and are marked with ○ .

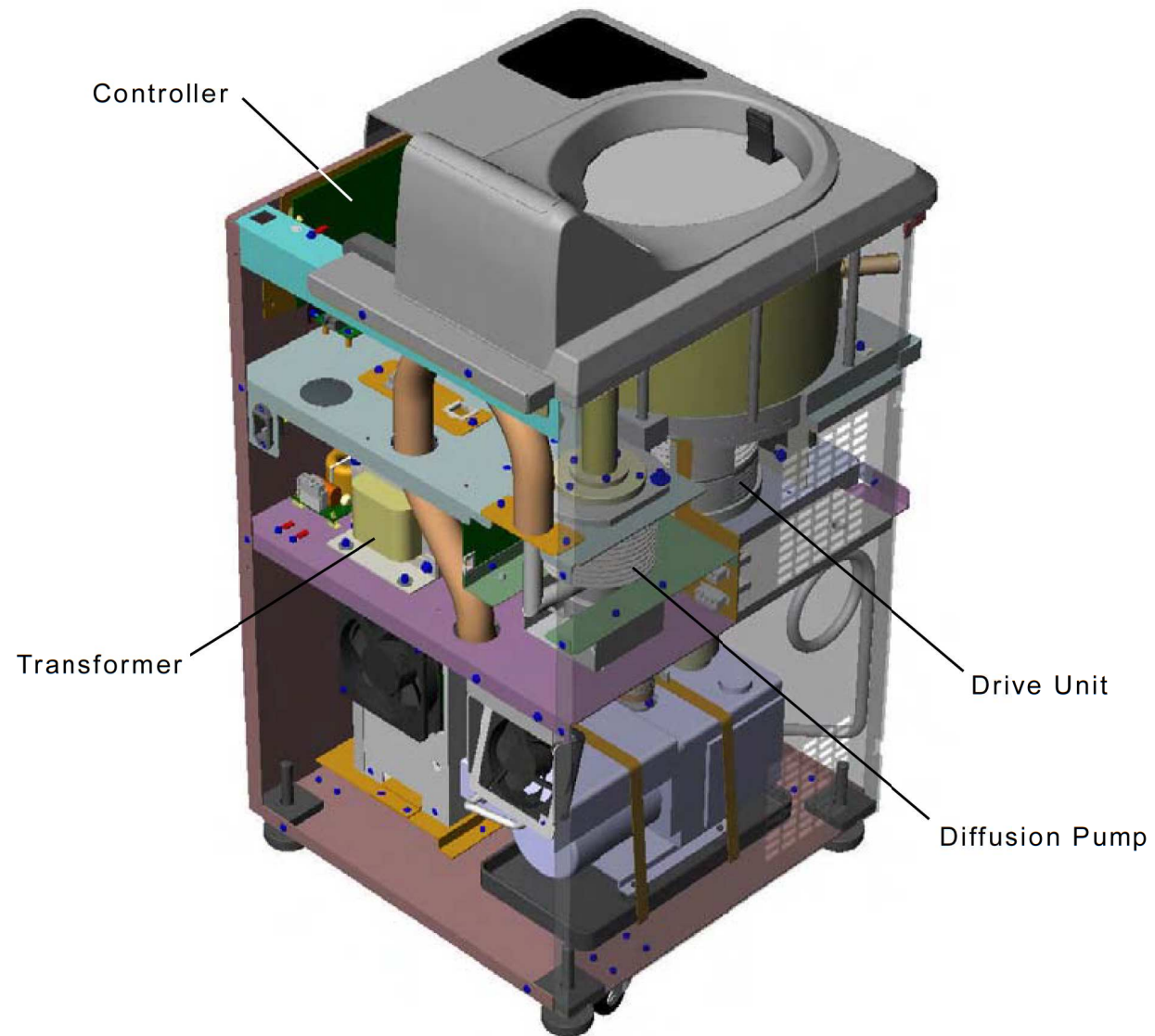
2 . HOW TO ORDER PARTS

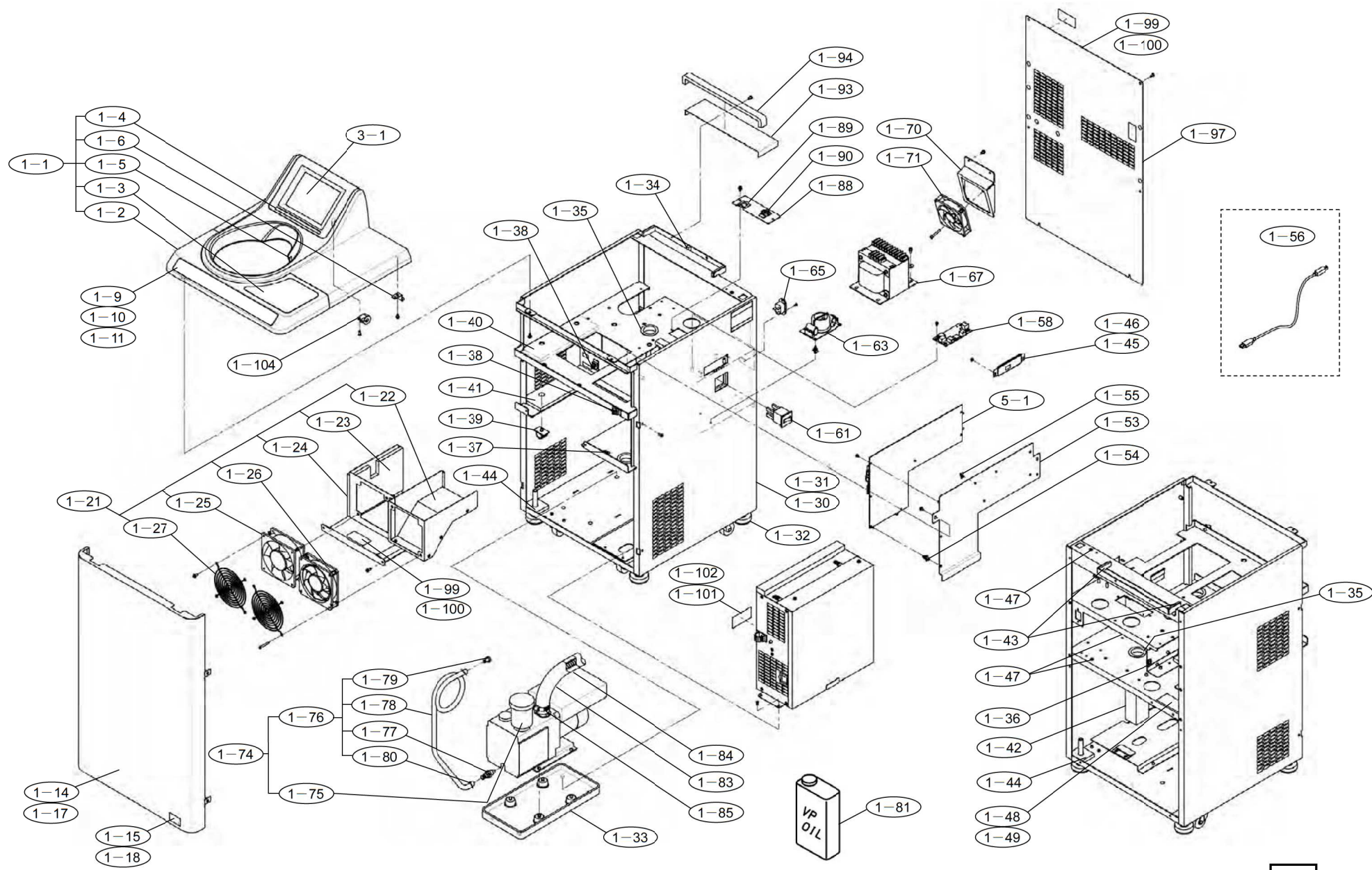
When you order parts, please specify the following information
(Example)

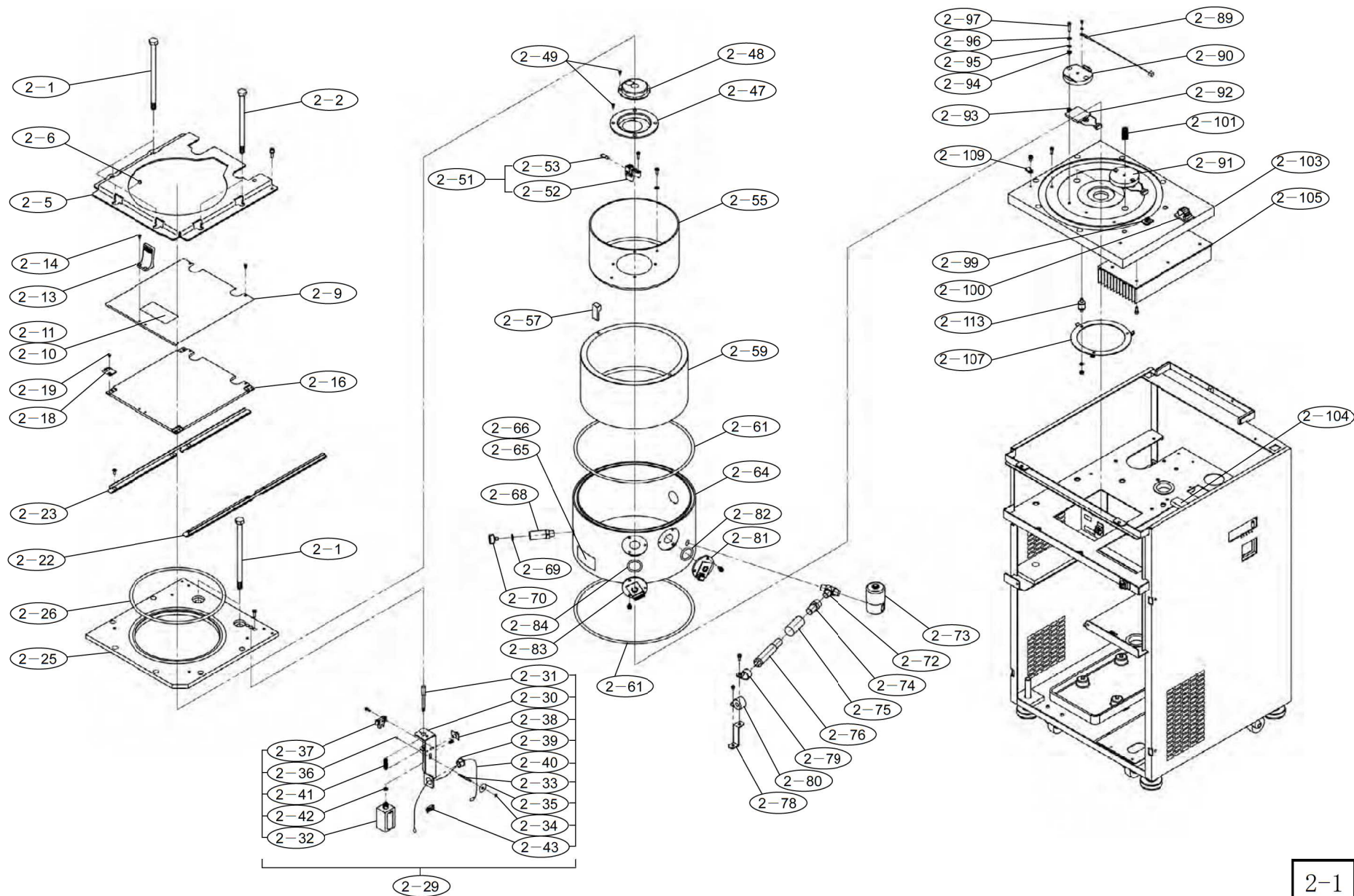
MFG . No	PART No .	DESCRIPTION	Q'TY
	S309222A	DP Ass'y	1

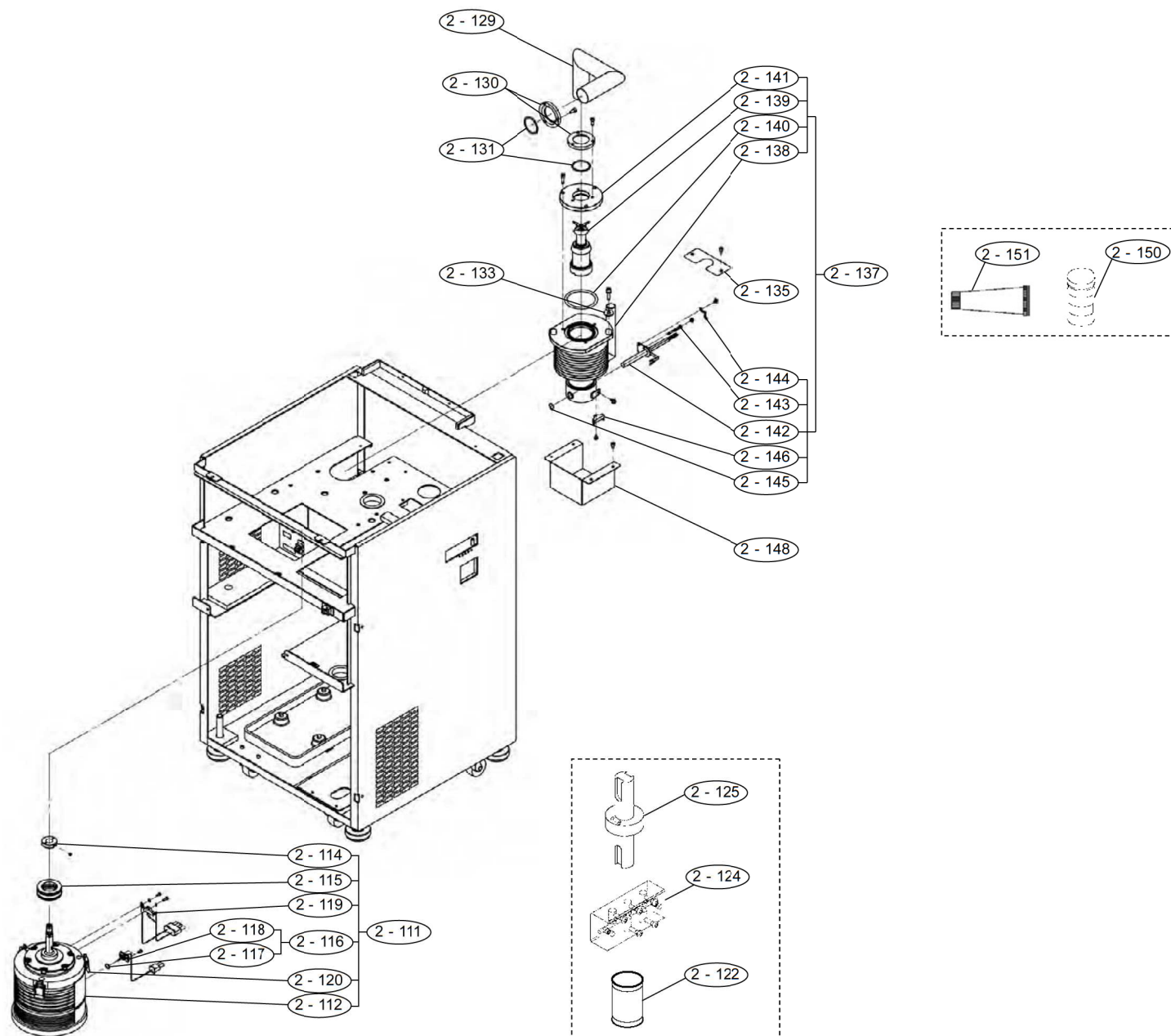
NOTE : The MFG . No . is given on the name plate of the product.

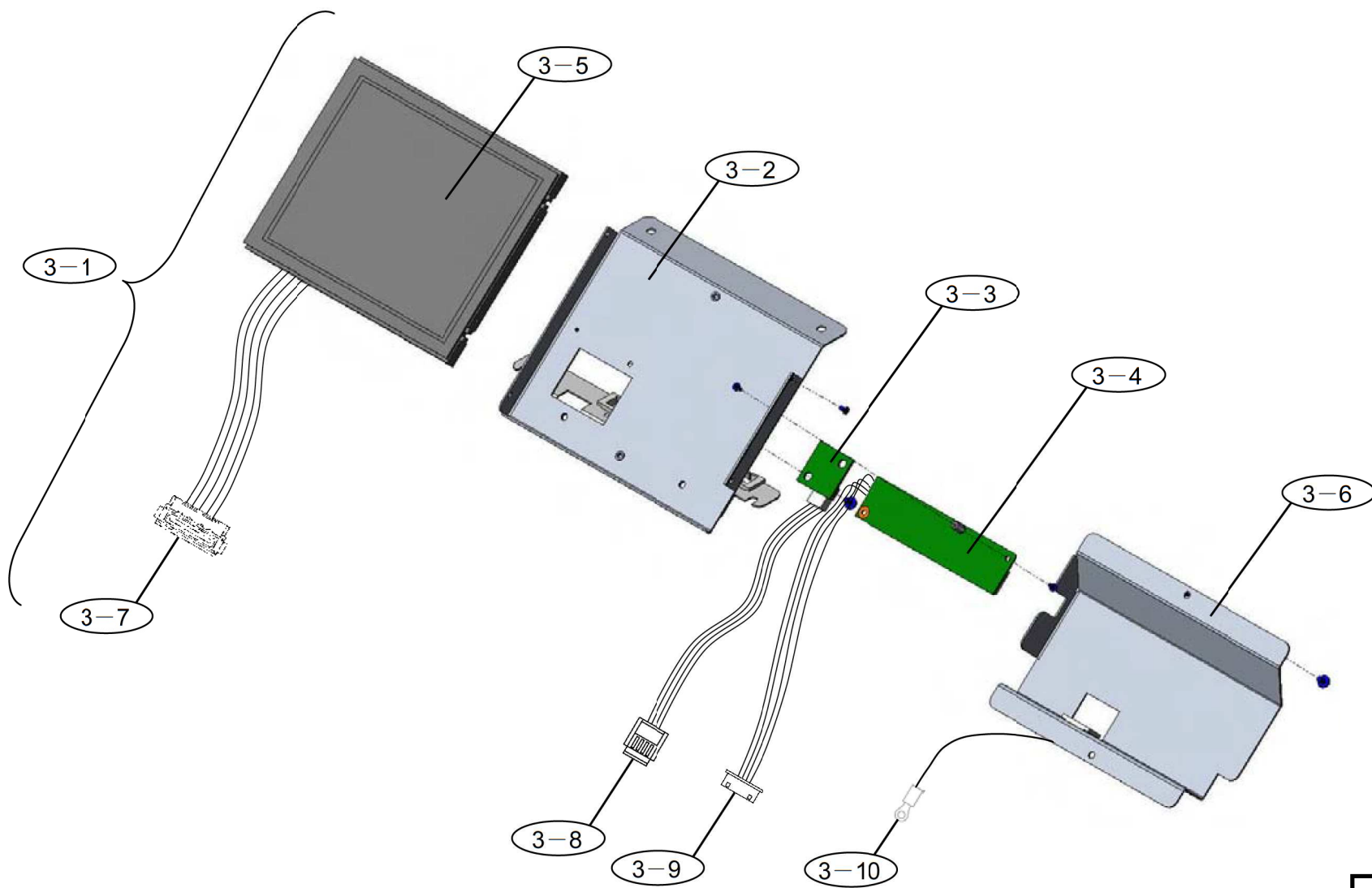


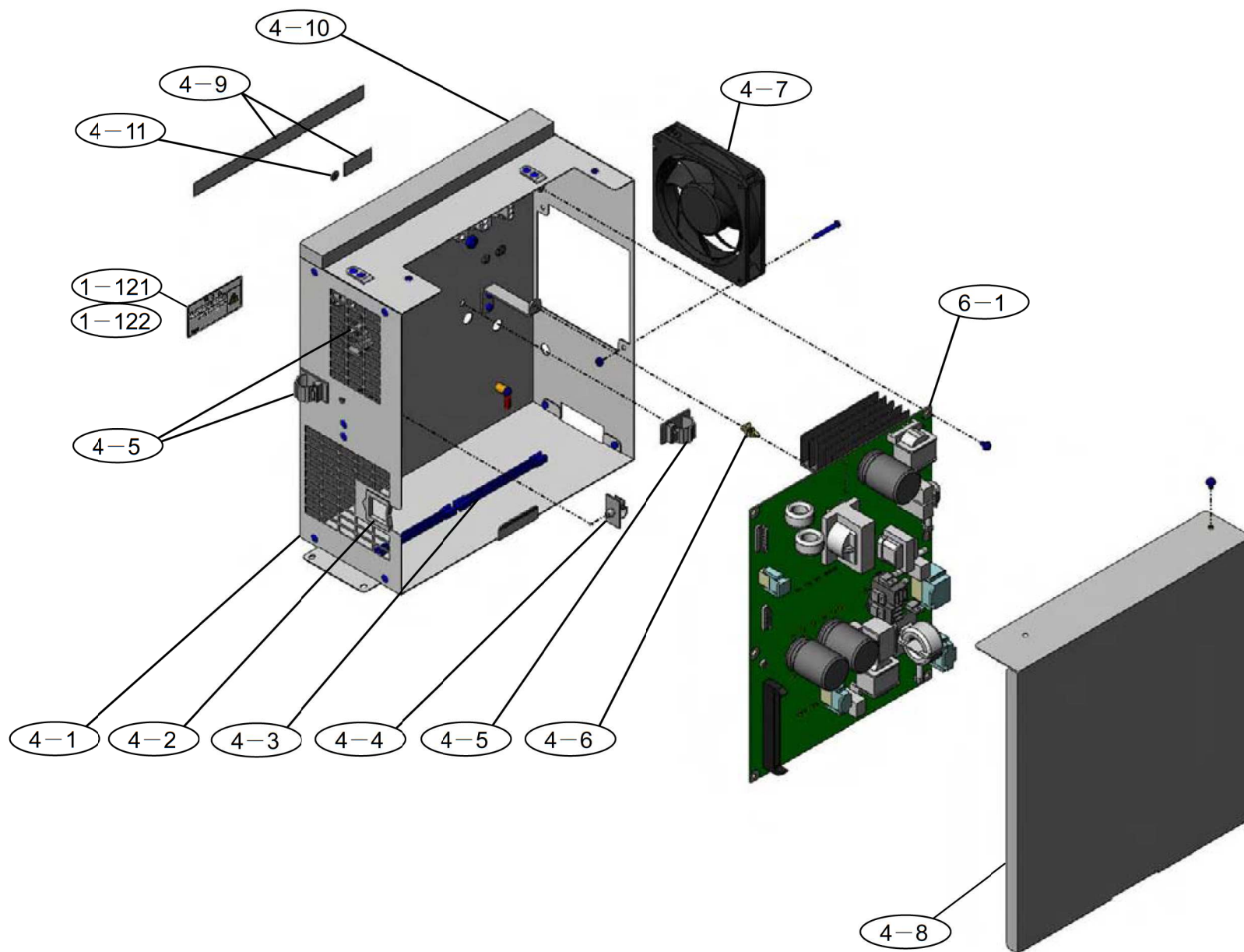


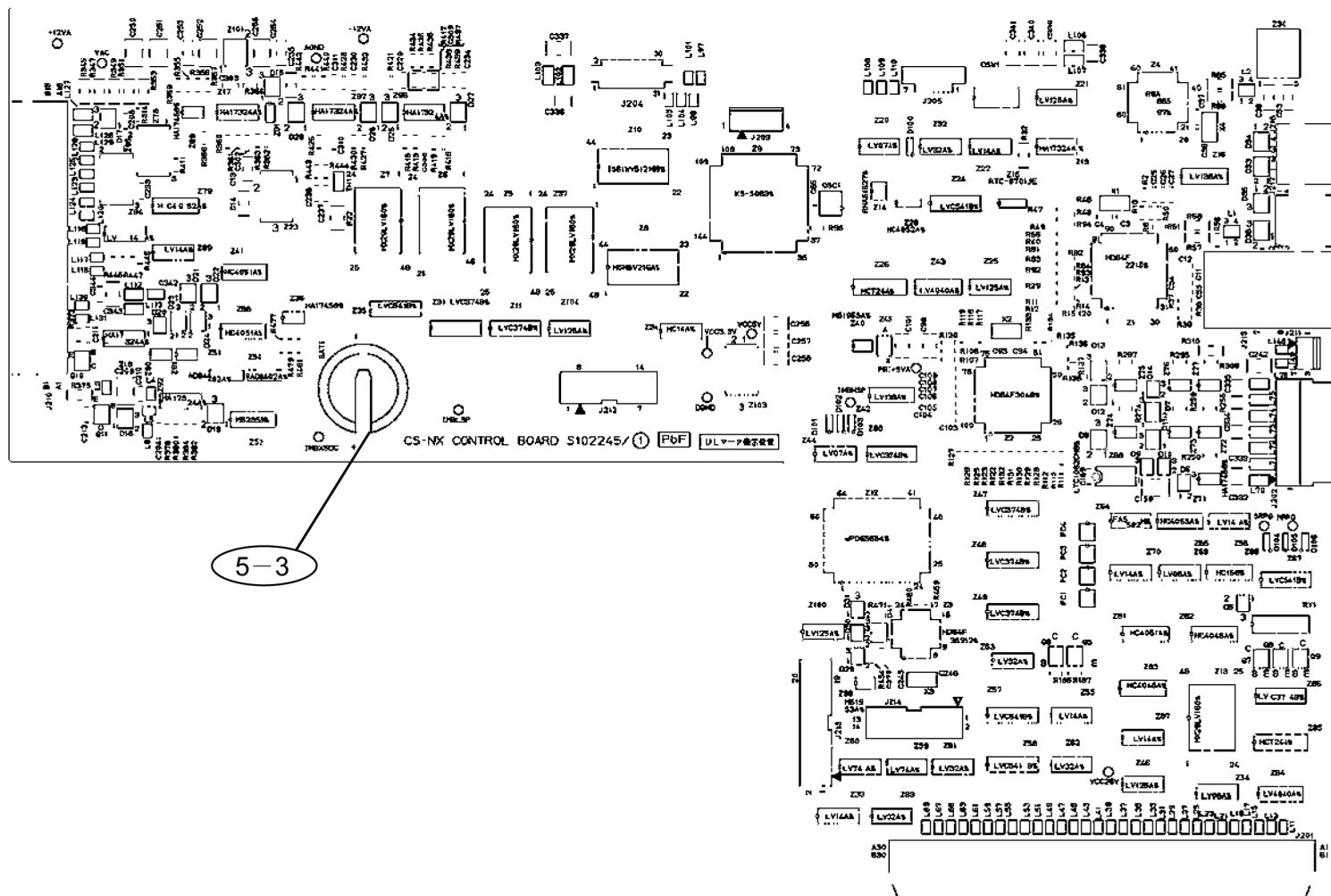


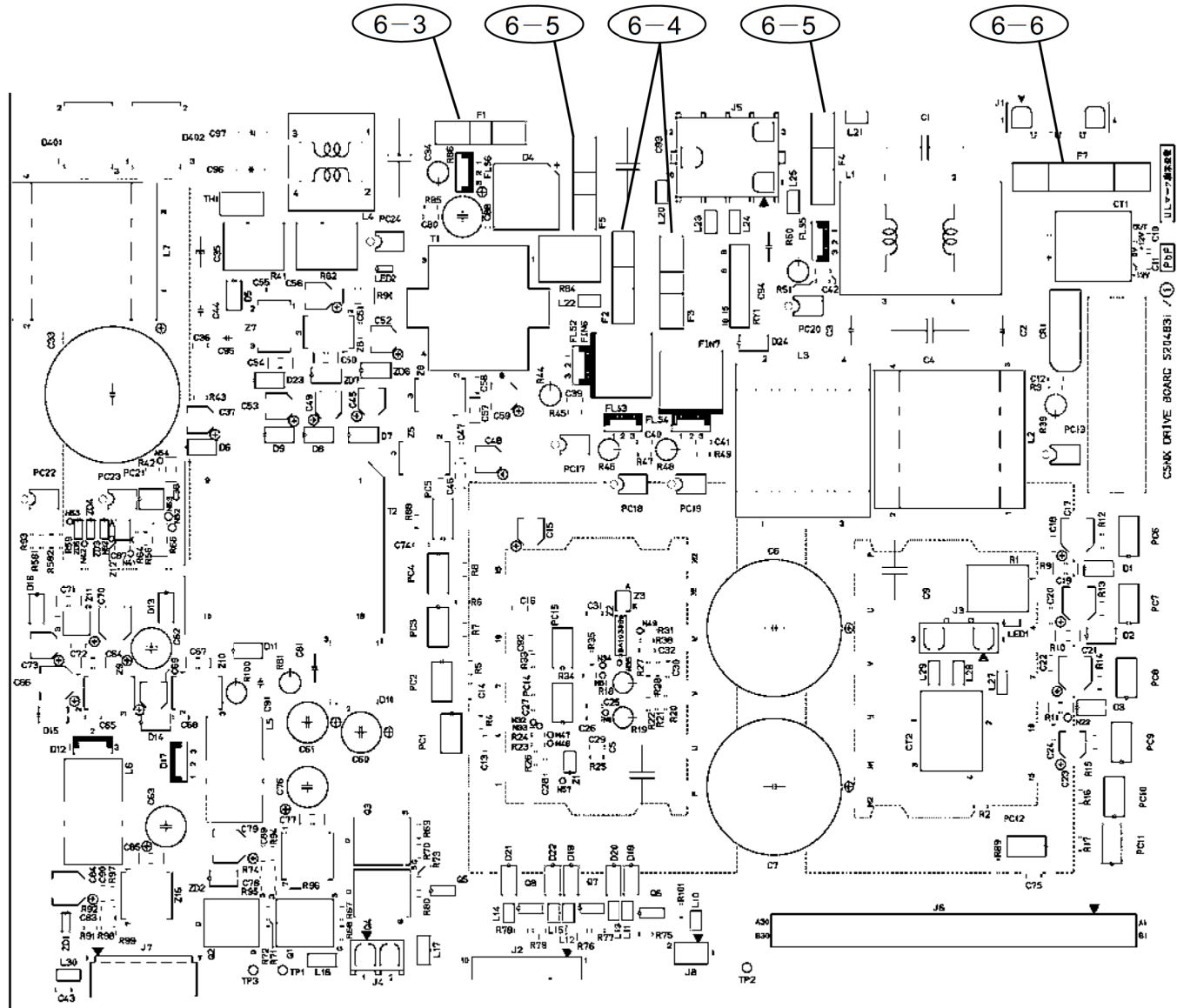




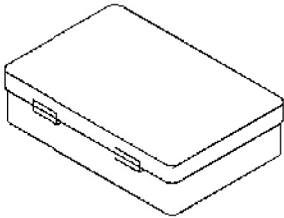




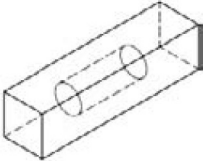









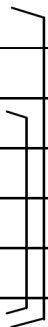
7-1

<p>7-4</p> 	<p>7-7</p> 	<p>7-20</p> <p>Preventive Maintenance Kit</p>	
<p>7-5</p> 	<p>7-8</p>  <p>7-9</p> 		
<p>7-6</p> 	<p>7-10</p> 		

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 1	1	}	S102477B	Table Ass'y			Incl. 1 - 2 ~ 6	
1 - 2	1							
1 - 3	1		S3099912	Table Mat				
1 - 4	1							
1 - 5	1							
1 - 6	2							
1 - 7								
1 - 8								
1 - 9	1		S205293	Label, MX 150 Plus				
1 - 10	1		S2052932	Label, MX 120 Plus				
1 - 11								
1 - 12								
1 - 13								
1 - 14								
1 - 15								
1 - 16								
1 - 17	1	}	S309988D	Front Cover Ass'y	NEW: S309988F		Incl. 1 - 18	
1 - 18	1							
1 - 19								
1 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 21								
1 - 22								
1 - 23								
1 - 24								
1 - 25	1		S412217A	DC Fan (DRV) Ass'y			CNDC12B7	
1 - 26	1		S412218A	DC Fan (FIN) Ass'y			D1225C12B7AZ-00	
1 - 27								
1 - 28								
1 - 29								
1 - 30								
1 - 31								
1 - 32	4		84594002	Level Adjuster			KC-280-3-EP-UL	
1 - 33								
1 - 34								
1 - 35								
1 - 36								
1 - 37								
1 - 38								
1 - 39								
1 - 40								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 41								
1 - 42								
1 - 43								
1 - 44								
1 - 45								
1 - 46								
1 - 47								
1 - 48								
1 - 49								
1 - 50								
1 - 51								
1 - 52								
1 - 53								
1 - 54								
1 - 55								
1 - 56								
1 - 57								
1 - 58	1		S310090A	Communication Board Ass'y				
1 - 59								
1 - 60								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 61	1		84335901	Circuit Protector				
1 - 62								
1 - 63	1		S308707A	Line filter Board Ass'y				
1 - 64								
1 - 65								
1 - 66								
1 - 67	1		S204924	Transformer				
1 - 68								
1 - 69								
1 - 70								
1 - 71	1		S412251A	DC Fan (REAR) Ass'y			D0925X12B4AZ-00	
1 - 72								
1 - 73								
1 - 74	1		S204963A	Rotary Vacuum Pump Ass'y			Incl. 1 - 75 ~ 80	
1 - 75	1		84692401	Oil Mist Trap			OMT - 050A	
1 - 76	1		S309302A	Tube Ass'y			Incl. 1 - 77 ~ 80	
1 - 77	1							
1 - 78	1							
1 - 79	1							
1 - 80	3							

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 81	1		S410357	Vacuum Pump Oil			R - 2 1L · Can	
1 - 82								
1 - 83	1		S407532	Vacuum Hose			1m	
1 - 84								
1 - 85								
1 - 86								
1 - 87								
1 - 88								
1 - 89								
1 - 90								
1 - 91								
1 - 92								
1 - 93								
1 - 94								
1 - 95								
1 - 96								
1 - 97	1		S310019	Rear Cover				
1 - 98								
1 - 99								
1 - 100								










No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
1 - 101								
1 - 102								
1 - 103								
1 - 104								
1 - 105								
1 - 106								
1 - 107								
1 - 108								
1 - 109								
1 - 110								
1 - 111								
1 - 112								
1 - 113								
1 - 114								
1 - 115								
1 - 116								
1 - 117								
1 - 118								
1 - 119								
1 - 120								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 1								
2 - 2								
2 - 3								
2 - 4								
2 - 5								
2 - 6								
2 - 7								
2 - 8								
2 - 9	1		S309163	Door Cover				
2 - 10								
2 - 11								
2 - 12								
2 - 13								
2 - 14								
2 - 15								
2 - 16								
2 - 17								
2 - 18								
2 - 19								
2 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 21								
2 - 22								
2 - 23								
2 - 24								
2 - 25								
2 - 26	1		84520135	O-Ring (included in PM kit S204365A)			1AG200	
2 - 27								
2 - 28								
2 - 29	1		S309185A	Door Lock Ass'y			Incl. 2 - 30 ~ 43	
2 - 30	1							
2 - 31	1							
2 - 32	1							
2 - 33	1							
2 - 34	1							
2 - 35	1							
2 - 36	1							
2 - 37	1		45713	Optical Micro Sensor Ass'y				
2 - 38	1							
2 - 39	1							
2 - 40	1							

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 41	1							
2 - 42	1							
2 - 43	1							
2 - 44								
2 - 45								
2 - 46								
2 - 47	1		S309567	Sensor Cover A-T				
2 - 48	1		S408503	Sensor Cover B				
2 - 49								
2 - 50								
2 - 51	1		45714	Spin Sensor Ass'y			Incl. 2 - 52 and 53	
2 - 52	1							
2 - 53	1							
2 - 54								
2 - 55	1		S309328A	Bowl Ass'y				
2 - 56								
2 - 57								
2 - 58								
2 - 59								
2 - 60								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 61	2		45053	O-Ring (A)			1AG250	
2 - 62								
2 - 63								
2 - 64								
2 - 65								
2 - 66								
2 - 67								
2 - 68								
2 - 69	1		4653137	O-Ring			1AP10A	
2 - 70								
2 - 71								
2 - 72								
2 - 73	1		465309C	Air Leak Valve Ass'y				
2 - 74								
2 - 75	1		S4012424	Vacuum Hose				
2 - 76	1		S303579	Pirani Sensor head			WP - 02	
2 - 77								
2 - 78								
2 - 79								
2 - 80								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 81	1		S204962E	Hermetic Seal Ass'y			Incl. 2 - 82	
2 - 82	1		45035	O-Ring			1AP26	
2 - 83	1		S204962F	Hermetic Seal Ass'y			Incl. 2 - 84	
2 - 84	1		45035	O-Ring			1AP26	
2 - 85								
2 - 86								
2 - 87								
2 - 88								
2 - 89	1		45721	Thermistor (HG) Ass'y				
2 - 90								
2 - 91								
2 - 92	2		S306842A	Thermo Module Ass'y				
2 - 93	4			Spacer				
2 - 94	4			Insulating Washer				
2 - 95	8		45749	Belleville Spring				
2 - 96	4			D4 Plain Washer				
2 - 97	4			M4X20 Pan head Screw				
2 - 98								
2 - 99								
2 - 100								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 101	2		45749	Compression Spring (T1)				
2 - 102								
2 - 103								
2 - 104								
2 - 105								
2 - 106								
2 - 107								
2 - 108								
2 - 109								
2 - 110								
2 - 111	1	└─┘	S204961A	Drive Unit Ass'y			Incl. 2 - 112 ~ 120	
2 - 112	1	└─┘						
2 - 113	1	└─┘	S412575A	Damping Rubber CS (SP) Ass'y			3 Pieces	
2 - 114	1	└─┘						
2 - 115	1	└─┘	429792A	Bellows Ass'y				
2 - 116	1	└─┘	S309301A	Oil Detector Ass'y			Incl. 2 - 117 ~ 118	
2 - 117	1	└─┘					1AS9	
2 - 118	1	└─┘						
2 - 119	1	└─┘	S305296B	Thermal Sensor (DU) Ass'y				
2 - 120	3	└─┘						

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 121								
2 - 122	1		S408791A	Drive Oil (B) Ass'y				
2 - 123								
2 - 124								
2 - 125								
2 - 126								
2 - 127								
2 - 128								
2 - 129								
2 - 130								
2 - 131	2		84520101	O-Ring			1AG30	
2 - 132								
2 - 133								
2 - 134								
2 - 135								
2 - 136								
2 - 137	1	∟	S309222A	DP Ass'y			Incl. 2 - 138 ~ 146	
2 - 138	1							
2 - 139	1		45724	Jet (B) Ass'y				
2 - 140	1		45705	O-Ring			1AV55	

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
2 - 141	1							
2 - 142	1		S309227A	Cartridge Heater Ass'y				
2 - 143	1		S412278A	Thermistor Ass'y				
2 - 144	1							
2 - 145	1							
2 - 146	1	✓	S304569B	Thermal Guard (B) Ass'y				
2 - 147								
2 - 148								
2 - 149								
2 - 150	1		12268	DP Oil (included in PM kit S204365A)			50cc	
2 - 151	1		84810801	DP Grease			60 g	
2 - 152								
2 - 153								
2 - 154								
2 - 155								
2 - 156								
2 - 157								
2 - 158								
2 - 159								
2 - 160								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
3 - 1	1	└─┘	S204916B	PANEL Ass'y			Incl. 3 - 2 ~ 10	
3 - 2	1	└─┘						
3 - 3	1	└─┘						
3 - 4	1	└─┘						
3 - 5	1	└─┘						
3 - 6	1	└─┘						
3 - 7	1	└─┘	S309232B	LCD Cable Ass'y				
3 - 8	1	└─┘	S412281B	Touch Panel Cable Ass'y				
3 - 9	1	└─┘	S412282B	LCD Inverter Cable Ass'y				
3 - 10	1	└─┘						
3 - 11								
3 - 12								
3 - 13								
3 - 14								
3 - 15								
3 - 16								
3 - 17								
3 - 18								
3 - 19								
3 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
4 - 1								
4 - 2								
4 - 3								
4 - 4								
4 - 5								
4 - 6								
4 - 7	1		S412250A	DC Fan (DBOX) Ass'y				
4 - 8								
4 - 9								
4 - 10								
4 - 11								
4 - 12								
4 - 13								
4 - 14								
4 - 15								
4 - 16								
4 - 17								
4 - 18								
4 - 19								
4 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
5 - 1	1	└┐	S204969B	Control Board Ass'y			Incl. 5 - 3	
5 - 2		└┐						
5 - 3	1	└┐	84355103	Battery			3V 50mAh Lithium	
5 - 4								
5 - 5								
5 - 6								
5 - 7								
5 - 8								
5 - 9								
5 - 10								
5 - 11								
5 - 12								
5 - 13								
5 - 14								
5 - 15								
5 - 16								
5 - 17								
5 - 18								
5 - 19								
5 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
6 - 1	1	└─┘	S204970A	Drive Board Ass'y			Incl. 6 - 3 ~ 6	
6 - 2		└─┘						
6 - 3	1	└─┘	84333401	Fuse			F1 4A	
6 - 4	2	└─┘	84333002	Fuse			F2 , F3 10A	
6 - 5	2	└─┘	84332701	Fuse			F4 , F5 2A	
6 - 6	1	└─┘	84332802	Fuse			F7 15A	
6 - 7								
6 - 8								
6 - 9								
6 - 10								
6 - 11								
6 - 12								
6 - 13								
6 - 14								
6 - 15								
6 - 16								
6 - 17								
6 - 18								
6 - 19								
6 - 20								

No.	Q'ty	Unit	Part No.	Description	Compatibility	C.a.	Remark	Rev.
7 - 1								
7 - 2								
7 - 3								
7 - 4								
7 - 5								
7 - 6	1		84850901	Level				
7 - 7	1		65937	Vacuum Grease				
7 - 8	1		S204746	Power Cord (L)			For 100 ~ 120V Instrument	
7 - 9	1		S204730	Power Cord (E、 L)			For 200 ~ 240V Instrument	
7 - 10								
7 - 11								
7 - 12								
7 - 13								
7 - 14								
7 - 15								
7 - 16								
7 - 17								
7 - 18								
7 - 19								
7 - 20	1		S204365A	Preventive Maintenance Kit				